

What is claimed is:

1. A disposable absorbent article comprising an absorbent core, said absorbent core comprising a durable, hydrophilic fluid pervious acquisition layer, said acquisition layer comprising:
  - (a) a acquisition layer substrate; and
  - (b) a hydrophilicity boosting composition coated on said substrate, said hydrophilicity boosting composition comprising a hydrophilicity boosting amount of nanoparticles, wherein said nanoparticles have a particle size of from about 1 to about 750 nanometers.
2. A disposable absorbent article according to Claim 1 wherein said substrate is selected from the group consisting of porous polymeric films, nonwoven materials and combinations thereof.
3. A disposable absorbent article according to Claim 2 wherein said nonwoven material comprises fibers selected from the group consisting of polyolefins, polyesters, cellulose and combinations thereof.
4. A disposable absorbent article according to Claim 3 wherein said nonwoven material comprises fibers selected from the group consisting of polypropylene, polyethylene, polyethylene terephthalate, rayon and combinations thereof.
5. A disposable absorbent article according to Claim 1 wherein said nanoparticles are inorganic nanoparticles.
6. A disposable absorbent article according to Claim 5 wherein said nanoparticles are selected from the group consisting of titanium dioxide, layered clay minerals, alumina oxide, silicates, and combinations thereof.
7. A disposable absorbent article according to Claim 6 wherein said nanoparticles are selected from the group consisting of titanium dioxide, Boehmite alumina, sodium magnesium lithium fluorosilicates and combinations thereof

8. A disposable absorbent article according to Claim 1 wherein said hydrophilicity boosting composition further comprises a surfactant.
9. A disposable absorbent article according to Claim 1 wherein said surfactant is a nonionic surfactant.
10. A disposable absorbent article according to Claim 1 wherein said storage layer comprises material selected from the group consisting of absorbent gelling material, fluff, and mixtures thereof.
11. A disposable absorbent article according to Claim 1 wherein said disposable absorbent article further comprises a substantially liquid impervious backsheet and an absorbent core, wherein said absorbent core is between said topsheet and said backsheet.
12. A disposable absorbent article according to Claim 1 wherein said disposable absorbent article is selected from the group consisting of diapers, adult incontinence products, training pant, feminine hygiene pads, and panty liners.
13. A disposable absorbent article according to Claim 1 wherein said substrate has been treated with a high-energy surface treatment.
14. A disposable absorbent article according to Claim 13 wherein said high-energy surface treatment is selected from the group consisting of corona discharge treatment, plasma treatment, UV radiation, ion beam treatment, electron beam treatment and combinations thereof.
15. A process for making a disposable absorbent article comprising an absorbent core, said absorbent core comprising a durable, hydrophilic fluid pervious acquisition layer and said process comprising the step of:
  - coating an acquisition layer substrate with a hydrophilicity boosting composition, said hydrophilicity boosting composition comprises a hydrophilicity boosting amount of nanoparticles, wherein said nanoparticles having a particle size of from about 1 to about 750 nanometers.

16. A process for making a disposable absorbent article according to Claim 15 wherein prior to or concurrent with coating of said substrate, said substrate is treated with a high energy surface treatment said high-energy surface treatment is selected from the group consisting of corona discharge treatment, plasma treatment, UV radiation, ion beam treatment, electron beam treatment and combinations thereof.
17. A process for making a disposable absorbent article according to Claim 15 wherein hydrophilicity boosting composition further comprises a carrier and a surfactant.
18. A process for making a disposable absorbent article according to Claim 15 wherein said nanoparticles are inorganic nanoparticles.
19. A process for making a disposable absorbent article according to Claim 15 wherein said substrate is selected from the group consisting of porous polymeric films, nonwoven materials and combinations thereof.
20. A process for making a disposable absorbent article according to Claim 15 wherein said disposable absorbent article is selected from the group consisting of diapers, adult incontinence products, training pant, feminine hygiene pads, and panty liners.